

WEST**End of Result Set**

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L5: Entry 1 of 1

File: USPT

May 28, 2002

US-PAT-NO: 6397206

DOCUMENT-IDENTIFIER: US 6397206 B1

TITLE: Optimizing fixed, static query or service selection and execution based on working set hints and query signatures

DATE-ISSUED: May 28, 2002

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-----------------|--------|-------|----------|---------|
| Hill; Justin H. | Durham | NC | | |
| Salo; Timo J. | Apex | NC | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE | CODE |
|---|--------|-------|----------|---------|------|------|
| International Business Machines Corporation | Armonk | NY | | | | 02 |

APPL-NO: 9/ 461954 [PALM]

DATE FILED: December 15, 1999

INT-CL: [7] G06 F 17/30

US-CL-ISSUED: 707/2; 707/3, 707/4, 707/5

US-CL-CURRENT: 707/2; 707/3, 707/4, 707/5

FIELD-OF-SEARCH: 707/2, 707/3, 707/4, 707/5

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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| | PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
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| <input type="checkbox"/> | <u>5463772</u> | October 1995 | Thompson et al. | 707/100 |
| <input type="checkbox"/> | <u>5493668</u> | February 1996 | Elko et al. | 707/200 |
| <input type="checkbox"/> | <u>5499367</u> | March 1996 | Bamford et al. | 707/9 |
| <input type="checkbox"/> | <u>5537574</u> | July 1996 | Elko et al. | 707/8 |
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| <input type="checkbox"/> | <u>5864840</u> | January 1999 | Leung et al. | 707/2 |
| <input type="checkbox"/> | <u>6278899</u> | August 2001 | Piche et al. | 700/44 |

ART-UNIT: 2771

PRIMARY-EXAMINER: Coby; Frantz

ATTY-AGENT-FIRM: Doudnikoff; Gregory M. Doubet; Marcia L.

ABSTRACT:

A technique for using working set hints and query signatures to optimize the selection and execution of fixed, static services or queries of information from a database, object server, or similar data repository. The working set hints describe how to read ahead when doing a database query, in order to retrieve data in a single database access that a task is likely to need as it continues executing. By storing the working set hints externally from the application code, the hints can be modified as experience is gained about the true working set that is required during use of each task without having to modify and recompile the application itself. Signatures are created and associated with query commands or services. These signatures are compared to the working set hints for a task when the task traverses an association and needs to retrieve data from the data repository. The signature which best matches the task's working set hints is automatically selected, and the query or service associated with this signature is then executed, providing an optimized database retrieval operation.

12 Claims, 19 Drawing figures

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L6: Entry 1 of 3

File: USPT

May 28, 2002

US-PAT-NO: 6397206

DOCUMENT-IDENTIFIER: US 6397206 B1

TITLE: Optimizing fixed, static query or service selection and execution based on working set hints and query signatures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC |
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☐ 2. Document ID: US 5822749 A

L6: Entry 2 of 3

File: USPT

Oct 13, 1998

US-PAT-NO: 5822749

DOCUMENT-IDENTIFIER: US 5822749 A

TITLE: Database system with methods for improving query performance with cache optimization strategies

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC |
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☐ 3. Document ID: US 5812996 A

L6: Entry 3 of 3

File: USPT

Sep 22, 1998

US-PAT-NO: 5812996

DOCUMENT-IDENTIFIER: US 5812996 A

TITLE: Database system with methods for optimizing query performance with a buffer manager

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC |
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L7: Entry 1 of 3

File: USPT

May 28, 2002

US-PAT-NO: 6397261

DOCUMENT-IDENTIFIER: US 6397261 B1

TITLE: Secure token-based document server

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |
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L7: Entry 2 of 3

File: USPT

May 28, 2002

US-PAT-NO: 6397206

DOCUMENT-IDENTIFIER: US 6397206 B1

TITLE: Optimizing fixed, static query or service selection and execution based on working set hints and query signatures

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[KMC](#)☐ 3. Document ID: US 6189046 B1

L7: Entry 3 of 3

File: USPT

Feb 13, 2001

US-PAT-NO: 6189046

DOCUMENT-IDENTIFIER: US 6189046 B1

TITLE: Mechanism and method for merging cached location information in a distributed object environment

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |
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 result set
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| <u>L6</u> | (hint\$ same (quer\$ or sql)).ab. | 3 | <u>L6</u> |
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| <u>L3</u> | L2 and hint\$ | 1 | <u>L3</u> |
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| <u>L1</u> | 6397206.pn. | 1 | <u>L1</u> |

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| <u>L5</u> | (hint\$ same (quer\$ or sql)).ti. | 1 | <u>L5</u> |
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| <u>L1</u> | 6397206.pn. | 1 | <u>L1</u> |

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